Fire Prevention and Safety in the Home — Strategies for Families

Deaths and injuries from fire have decreased greatly in recent years thanks to smoke detectors and other home fire prevention efforts. Yet, fire is the second leading cause of accidental death in the United States. Some simple safety measures can reduce your chance of death or injury.

How simple can safety measures be? They can be as simple as discussing a fire evacuation plan with family members and as basic as regularly changing a smoke detector battery.

Fire produces poisonous gasses that make people disoriented and drowsy. Without the sound of a smoke alarm, it's possible to sleep through a fire. Fire also spreads quickly, engulfing whole rooms in seconds and a home in as little as five minutes. This leaves no time to safely grab valuables or make a phone call.

Basic Fire Safety
Install at least one smoke detector per floor in your home, including basements and attics. Consider one powered by your house's electrical system. At the least, install battery-powered smoke detectors. Good places to install smoke detectors include:

- Outside bedrooms on the ceiling or high on the wall
- At the top of open stairways
- At the bottom of enclosed stairs
- Near (but not in) the kitchen

Avoid spots where air circulation can prevent smoke from getting into the detector, such as near a heating register or air conditioner.

Clean and test smoke detectors regularly. Replace the batteries at least yearly. Make it a habit to change batteries at either spring or fall time changes—at the same time you turn your clock backward or forward.
Place fire extinguishers in the kitchen and utility areas of your home, and be prepared to use them. A multi-purpose fire extinguisher—one with an ABC rating—is your best bet. It can fight paper, wood and cloth fires; flammable liquids and gases; and those of an electrical origin.

Create and practice a family fire plan. Plan two escape routes from every room in the house. Then have family members regularly practice fire drills, keeping low to the ground because smoke rises and checking for hot doors before opening them. Finally, pick a place outside where your family can meet to make sure everyone is out and safe.

Don't let trash and junk accumulate. Clean out hallways, stairwells, attics, basements, closets and garages frequently to avoid fire hazards. Don't place papers or magazines on radiators or near stoves or fireplaces.

Check electrical wiring and appliances for safety hazards. Replace any worn or frayed cords, exposed wires or loose plugs. Never place extension cords under rugs or allow lamp shades to touch electric bulbs. Make sure electrical wiring does not touch home insulation.

Use caution with kerosene, benzene, naptha and similar fluids indoors or near flames. They will ignite readily, from any kind of spark. Never use gasoline indoors.

Don't leave rags soaked with oil or turpentine lying around. They may catch fire by themselves (spontaneous ignition). Store them in an airtight metal container. If disposing of them, soak rags with water and hang them outside to dry, then soak them with water again and place them, still wet, in a sealed plastic bag within your normal trash.

Check heating devices. Many fires are ignited by faulty furnaces or stoves, sooty chimneys and cracked or rusted furnace parts. Have your furnace cleaned and checked annually. Use caution with alternative heating sources, such as wood and coal burning stoves.

Be sure your house numbers are large and easily visible from the road. This helps the fire department locate your house promptly.
In Case of Fire
Do not try to put out a fire that is getting out of control (one that is bigger than a chair). Instead, get everyone out of the house and call the fire department immediately.

Crawl to your escape. Smoke and heat rise. The air near the floor is cooler and safer for you to breathe.

If your clothes catch on fire stop, drop and roll until the fire is extinguished. Running only makes the fire burn faster.

If the door of the room you plan to leave from is hot, escape through a window. If you cannot escape, place a wet towel or similar item under the door to keep smoke out, then hang a light-colored sheet outside the window and yell to alert firefighters to your presence.

Special Types of Fires

- Electrical fire—Do not use water on an electrical fire unless you are able to shut off the electricity first. If possible, put out the flames with a fire extinguisher, or smother them.
- Oil or grease fire—Shut off the supply of whatever is burning. Smother the flames with rugs, sand, earth or other heavy materials; use a fire extinguisher if you have one. Do not use water. For small kitchen fires, cover the burning pan with a lid or use table salt or baking soda for smothering.
- Gas fire—Shut off the gas supply. Then use a fire extinguisher, water, sand or dirt to put out whatever is burning.

After a Fire
Cover holes in the house against rain and secure the entry. Contact your insurance agent about estimates and loss coverage. Save receipts for anything spent after the fire. They will be useful for insurance and income tax claims.

Contact your local disaster relief service, such as the American Red Cross or Salvation Army, for temporary housing, food, eyeglasses or medicines.

Do not enter a fire-damaged building unless authorities give you
permission. Once inside, beware of smoldering remains and structural damage.

Have an electrician check household wiring before the current is turned back on. Be sure to restore all fire protection systems before occupying the house.

Discard food, beverages and medicines that have been exposed to heat, smoke or soot. Do not discard damaged items until your insurance agent has assisted you with your claim.

If you have a safe or strong box, do not try to open it. A safe or fire-proof box can hold intense heat for several hours. If the door is opened before the box is cooled, the entering air combined with the high internal temperature may cause the contents to burst into flames.

Additional Resources

- Your local fire department
- the American Red Cross
- the Federal Emergency Management Agency